



THE COMMONWEALTH OF MASSACHUSETTS
WATER RESOURCES COMMISSION
100 CAMBRIDGE STREET, BOSTON MA 02114

Meeting Minutes for January 12, 2006

Members in Attendance:

Kathleen Baskin	Designee, EOE A
Marilyn Contreas	Designee, DHCD
Glenn Haas	Designee, DEP
Russ Cohen	Designee, DFG
Jonathan Yeo	Designee, DCR
Gerard Kennedy	Designee, DAR
Joseph E. Pelczarski	Designee, CZM
John LeBeaux	Public Member
David Rich	Public Member

Others in Attendance:

Mike Gildesgame	DCR
Linda Hutchins	DCR
Bruce Hansen	DCR
Frank Hartig	DCR
Margaret Callanan	EOEA
Vandana Rao	EOEA
Sara Cohen	DCR
Steve Garabedian	USGS
Martha Stevenson	LWVM & WSCAC
Deidre Menoyo	SuAsCo RSC
Marilyn McCrory	DCR/OWR
David Young	CDM
Sandy Rabb	Mass DEP
Sarah Weinstein	Mass DEP
Madelyn Morris	Mass DEP
Nancy Goodman	ELM

Agenda Item #1: Executive Director's Report

Hansen provided an update on the hydrologic conditions:

- Last December was a normal month. The statewide precipitation was 99% of normal. There were some variations: the Cape and Islands Region was 72% of normal; the Central Region was 116% of normal.
- Ground water levels were normal to above normal statewide.

- Streamflow was above normal over most of the State, with the exception of a few small areas that were only normal. The composite streamflow for December was above normal.
- There were two significant storm events, one on December 16 was mostly snow, and one on the 26th was the same amount of water but in the form of rain, so it caused the rivers to rise.
- Reservoir levels were above normal for this time of year.
- The Drought Mitigation Center shows that Massachusetts and all other New England states and New York are well above levels for the period of record so there are no drought problems expected.
- Another storm is predicted for this weekend. It will be a rainfall event. The Weather Service's 6-10 day outlook is for above normal temperatures and above normal precipitation.

Baskin said that she did not have anything to add through the Executive Director's Report.

Open Forum: R. Cohen said that the Massachusetts Surface Water Quality Standards were up for public comment. The Riverways Program is trying to get the word out so that DEP receives some thoughtful comments. Baskin added that EOEA would be convening a working group to investigate streamlining the permitting for dam removal.

Agenda Item #2: Vote on the Minutes of October and November 2005

A motion was made by LeBeaux to approve the minutes for October 2005 and was seconded by Kennedy. The vote was seven to approve with one abstention.

A motion was made by Contreas to approve the minutes for November 2005 and was seconded by Haas. The vote was unanimously in favor of those present to approve.

Agenda Item #3: Vote on DEP's Proposed Revisions to 310 CMR 15.00 (Title 5)

This is the second presentation made to the WRC on this subject. Haas said the Commissioners had been sent the comments received on the proposed revisions. Most of the comments were in favor of the changes. One change made was to the cluster development section where the phrase "50% open space, not including wetlands" is discussed. This has been modified to state that 50% open space could include wetlands, but the wetlands cannot exceed the percentage of open space. There was also recognition that towns may have their own cluster development regulations. These would override DEP's requirements. There were a lot of comments about Underground Injection Control (UIC) but there are not going to be any changes to this section.

There have been a lot of issues about properties being divided, resulting in septic systems being in the wrong place. There have been some changes to address this. There were a lot of comments on soil evaluators and system inspectors. Most people thought this was a good idea, but thought that the number of contact hours was too much. Some adjustments have been made to this section.

There were a lot of other details having to do with types of buildings and expected flows. Modifications have been made based on comments received. The nitrogen credit for composting

toilets was increased to 660 gpd and, on a case by case basis, 770 gpd for non-residential facilities.

The regulations have not been changed since 1995. Everyone agrees that this is too long. So DEP is setting up a small work group to meet every 3-6 months to keep track of when regulations have been amended. In the future, there will be more frequent updates to Title 5.

R. Cohen asked if the regulations would be posted to the DEP Web Page after they are approved. Haas responded yes. R. Cohen suggested that DEP put tips on how water conservation could prolong the life of septic systems on the web page.

V	A motion was made by Rich with a second by LeBeaux to approve the revisions to 310 CMR
O	15.00, Title 5.
T	
E	The vote to approve was unanimous of those present.

Agenda Item #4: Vote on the Proposed Regulations Regarding Dental Mercury Amalgams

Weinstein reminded the WRC that a presentation on this subject had been made in September. EOEa has a Zero Mercury Strategy which calls for the virtual elimination of sources of mercury into the environment. This strategy was developed in 2000 to assure that Massachusetts can implement the commitments made in 1998 by the New England Governors and Eastern Canadian Premiers on mercury reduction in the environment. These regulations are part of the Zero Mercury Strategy. There are about 4,000 practicing dentists in the Commonwealth. This sector had been responsible for discharging about 330 pounds of mercury per year, until January 2004, when a voluntary program was set up in cooperation with the Massachusetts Dental Society. Through this program, 75% of the dentists in the Commonwealth have installed amalgam separators. The voluntary program also requires that dentists collect and recycle all the waste mercury that is not going through these separators. While the voluntary program has had a large compliance rate, there are still an estimated 25% of dental practices have not yet installed amalgam separators and do not appear to be recycling their mercury waste. So DEP has drafted regulations to include all dental practices. Since September, six public hearings were held on these regulations.

Weinstein referred to the “response to comments” document that had been sent to the WRC. The proposed regulations require 98% mercury removal. The Dental Society had maintained that there are some specific dental practices which had space considerations. These cases, they maintained, may not be able to accommodate a separator that could remove 98% of the mercury waste. DEP specifically asked for comments on this and received none, so the regulations were not changed. The voluntary mercury reduction program did not require 98% removal, so there is a provision that if the separators used by participants in the voluntary program continue to meet 95% removal efficiency, they can continue to be used until replacement is needed. DEP had proposed that certain types of dental practices that only occasionally generate waste amalgam be exempted from these requirements. Although many comments were received on this, the specific list of dental specialties that will be exempted was not changed. There are also some

dentists who have made explicit decisions not to use mercury for fillings (they are using the newer non-mercury composite fillings) and some dentists will not even remove mercury fillings. These dentists will be able to file a certification with DEP saying this and would then be exempt from these requirements.

Some interesting comments on the ISO protocol being used as a performance standard for removal efficiency were received. This is a testing protocol that has been established by the International Standards Organization (ISO) and used world-wide. UMass Boston conducted research for EOE, which indicated that the testing does not always predict how a system will perform in the “real world”. So some operational requirements were added to assure that these systems continue to work in the field, as they were designed. These are in the regulations. There were some questions about what would happen if ISO changes its protocol. DEP is requiring a particular protocol and if ISO changes it, the revised protocol will be reviewed and DEP will see if the regulations need to be changed. There is also a provision to allow DEP to establish a testing protocol. Most of the other comments had to do with the administration of the program or with things that are beyond DEP’s jurisdiction.

There was also a comment that all dental practices should do a one-time cleanout of their plumbing lines because mercury could have accumulated there over time. It was decided not to require this, after a fair amount of discussion, partly because it runs counter to other requirements of the program. This could be a great expense and the benefits are dubious. Many dentists use bleach to disinfect their lines. This mobilizes the mercury in the lines and traps, and insures that more mercury would be discharged. The regulations require that non-oxidizing substances be used for disinfecting the lines. Finally, the regulations require that all the mercury be collected and recycled.

The regulations are now being reviewed by EOE. After that, they will need to go to Administration & Finance. Weinstein hopes they will be published in the Massachusetts Register in February, and take effect April 3rd. Dentists who didn’t participate in the voluntary program will have 60 days to install the mercury amalgam separator and file their initial certification with DEP.

LeBeaux asked if the 60 day period was from the day the regulations went into effect. Is this a reasonable time frame? Weinstein said that it was reasonable and that DEP has been working with the Dental Society on outreach for several years. In effect, dentists have had since January 2004 to install separators. She added that 75% of the dental community was already in compliance. Contreas asked if this was part of the environmental results program. Weinstein said that it was. Yeo congratulated DEP for stepping forward with these regulations. DEP said that MWRA staff had been very helpful with their development.

V	A motion was made by Yeo and seconded by Contreas to approve DEP’s proposed
O	regulations regarding dental mercury amalgams at 310 CMR 73.00.
T	
E	The vote to approve was unanimous of all those present.

Agenda Item #5: Presentation: Integrated Water Resources Management Plans, Overview and Guidance

Morris said that many people at DEP have worked on this topic. It has been a real team effort. She said that DEP is hoping for some guidance from the WRC on questions that still remain, such as under what circumstances should communities do this sort of planning. The Integrated Water Resources Management Plan (IWRMP) Guidance was one of the items that came out of the Water Policy Task Force. Handouts for the Power Point presentation were distributed. Water is a finite resource that needs to be carefully managed in order to promote water quality and to prevent water quantity concerns. Over 60% of the water bodies have been assessed for water quality. There are many sources of pollutions: point and non-point sources. Development can contribute to these sources of pollution.

Background Although Massachusetts is thought to be a water rich state, a high level of water use during the summer causes very low flows (particularly in August and September). Water quantity problems should begin to be addressed through the Fix-it-First policy, in this case fixing existing infrastructure. Alternatives to be considered should include water conservation, optimization of existing water supply sources and managing them so as to have the least impact on the environment, leak detection and repair, meter replacement. Communities should also use the “fix-it-first” policy on the wastewater side, which would include Infiltration and Inflow removal, improving operation and maintenance, and capital management so that more connections will not be added than the system can handle, and correction of hydrologic deficiencies.

Even with the fix-it-first policy, there will be some need for new facilities. In these cases, communities should look at all the different parts of constructing these facilities, both during the actual construction and after, including the secondary growth impacts and determining if there is any need to mitigate those impacts, including land use control. The impacts to the water cycle should also be studied. Possible mitigation measures would be to direct certain types of development to certain areas and to protect drinking water sources.

DEP wants to encourage the use of land use controls to regulate land clearing for lawns, amounts of topsoil and private wells. DEP also is looking to provide incentives for stormwater management BMPs and source optimization to manage existing sources in order to minimize impact on streamflow. One example would be to minimize use of stream-side wells in the summer, if there are other options.

Morris asked the Commission again, “When should communities prepare Integrated Water Resource Management Plans?” The theory behind these plans is to find the most environmentally appropriate and cost-effective menus for water supply, wastewater and stormwater problems and to ensure that when communities solve one problem, they do not create another. Another reason for communities to develop these plans is to enhance their chances of getting money from the State Revolving Fund (SRF). Currently planning is required for wastewater funding under SRF. There are also regulatory requirements that mandate certain components of an IWRMP, but there is nothing that requires every element of these plans. One option would be to focus on the elements that are appropriate for a particular community. One factor in deciding which elements are appropriate is the regulatory environment. NPDES

permits require I/I reduction programs. NPDES' reach has recently been extended to member communities of regional wastewater treatment plants – not just the communities that own the plant. Many communities with combined sewer overflows (CSO) are required to develop long-term CSO plans. DEP is developing TMDLs for impaired waterways. Communities can develop IWRMP plans to figure out how they can use the TMDL and make sure that their contribution of pollution does not exceed the limit. Other regulatory requirements may trigger an IWRMP. If a community frequently needs an emergency declaration, water supply planning will be required to find a long-term source to meet these needs. Anticipated future regulatory requirements may also drive the planning process. The drinking water program keeps getting new standards and new pollutants to be regulated. Some of the older water treatment plants may not be able to meet the new standards and will need to be upgraded. Many communities are under Phase 2 stormwater requirements and will need to develop stormwater programs. The stormwater component of the IWMP is a way to meet this requirement. There are a number of large wastewater and water supply projects that trigger MEPA review. Developing an IWMP will meet those requirements, as well as those for Interbasin Transfer Act review.

The planning process requires and benefits from public participation. There are many ways to do this, such as Citizens Advisory Committees and Technical Advisory Committees. If an IWRMP is financed through SRF, public participation and meetings are required. The scope of work for the IWRMP is pretty standard. How this gets applied depends on the problems a community is trying to address. The plan should address issues that will be in place or occur over the next 20 years and should include a discussion of impacts to the human as well as natural environments. Morris went on to discuss the details that needed to be addressed for water supply, stormwater and wastewater. In addition, there should be a mitigation strategy for the recommended plan.

Once there is a recommended plan, the community should prioritize a schedule for implementation and set up a means of financing implementation. She then said that the reason she asked the Commission the question of when a community should develop these plans, is that while there is an interest in planning so that communities are proactive in addressing these issues, there is also the desire not to be unduly burdensome to communities. She also said that DEP was looking for input into the criteria for approval of these plans. DEP also wants to develop some reasonable timelines so that communities and consultants can estimate how long this process should take.

Discussion Rich said that the question of when the plan should be required was intriguing. He said although he could not answer this question, he thought that a plan this comprehensive could require some water suppliers to go into areas where they had no authority. He said this will be a boon to engineering consultants because it would be an expensive and involved process. Morris replied that DEP was very much aware of this. One of the things being considered was to only require those elements of the plan that would be most appropriate for a particular community. Rich suggested that if an IWRMP was required, some elements are not under the purview of water suppliers, such as stormwater. He agreed that this should be broken down into the relevant topics. For instance if it is a water supply issue, the plan should only address water supply issues. Morris said that if a water supplier in a stressed basin needed to develop a new source, there could be certain environmental impacts associated with this. In order to address these impacts, it may require addressing impacts from the wastewater or stormwater sectors. One

outcome of this planning process, she said, especially in the more common situation of a municipal-run water department, is that water supply people will have to talk to wastewater people and work together. She said that cooperation between town departments should be encouraged.

R. Cohen said the reason that some communities are in such a mess is that water suppliers don't control land use or wastewater or stormwater issues. He continued that whatever gives water suppliers leverage over other entities within the town to make good decisions in the broader interest of the town is very valuable. So, he said, to the extent that this process does that is great. He added that this type of planning was the essence of Smart Growth.

Gildesgame asked who in the community would be responsible to pull all the pieces of an IWRMP together. Morris said that each community would have to decide this itself. She added the WMA permits are now issued to the community, rather than the water department, to emphasize that water management was a shared responsibility. Baskin said that the initial work on this started in the wastewater arena, under comprehensive wastewater management plans. These plans focused only on one aspect of water resources planning and there was an outcry to look at impacts on other issues. She suggested that there might be a way to define the minimum requirements for these plans. Morris said a place where it may make sense to require more than the minimum might be a community that needed to expand its wastewater treatment plant, but had water supply shortages. Does it make sense to expand the treatment plant for wastewater, she asked, when the water supply that will become wastewater is limited? Another area is CSO planning. If the problem could be addressed with better stormwater management, a community may not need to invest as much in treatment of CSOs. We need to identify areas where it makes sense to go beyond the tunnel vision of the past.

Yeo asked if the concept of using MEPA would lead to a developer funding these plans by the municipality. Morris replied that it could be a project where the municipality was the proponent. If it makes sense to look at the various aspects of an IWRMP, this could be required in the scope for the project. This is something a municipality would do. In some cases, it might make sense for a developer to do an IWRMP. Haas said that there was SRF funding for wastewater and stormwater planning but not currently for drinking water planning, although these could be added. He said that DEP had a lot of experience with wastewater. Comprehensive wastewater studies, at a minimum, take 18 months. An average study with no complications costs \$300,000 to \$500,000. If larger studies are required, it will take a significantly more time and money. That's why it is important to determine when these studies will be required. Yeo agreed. He suggested that there may be very complicated situations where it would be appropriate to look at all these elements in an integrated fashion, but in most others, there may only be a tangential relationship to the other elements. So although these issues should not be ignored, there should be some flexibility in how much depth the analyses of these issues go into. He added that if these were required across the board, not only would it be burdensome to communities, but DEP would need to have the staff to review all these plans. Haas said that one of the things they are looking at is a matrix of the issues that would help in determining what elements of these plans need to be addressed.

Hutchins said these may make sense when looked at in the context of stressed basins and water budgets. Why wait for a new MEPA trigger when towns may need to address existing problems. The water budgets studies may inform priorities and allow towns to triage water resources mitigation needs.

McCrory said that she advocated planning. She suggested that perhaps the IWRMPs could be developed in phases over a number of years. Morris said that this would be considered. Pelczarski asked if these plans would be limited to municipalities. Water does not limit itself to political boundaries, he said, so perhaps the plans should be developed on a basin-wide or statewide basis. Morris said the process does encourage regional solutions and there have been some regional plans. However, she said that sometimes it is difficult to get communities to work together because of the Home Rule tradition. In some cases, the regional solution will be the best solution. Pelczarski then asked if DEP could force communities to work with their neighbors. Haas said that this was questionable legally and impossible politically. Morris added that if a community was in an enforcement situation, DEP could require them to come into compliance, but cannot dictate how they come into compliance. Haas said that the watershed initiative had been able to look at watershed-wide issues and had some successes getting communities to work together. R. Cohen said the MEPA scoping session could provide a model for “front-loading” an analysis of watershed-wide problems and comprehensive solutions.

Morris said the water budgets would provide a lot of the information that communities need. LeBeaux said that as a local town official, he had questions about the triggers. He did not think that an application for a Water Management Act permit should trigger planning at this level. Towns only have only so much money, and they are involved in many planning efforts already. Planning efforts are expensive and must be done before any work can be done. But communities want to do the actual work that these planning efforts support as quickly as possible. In a perfect world, he said, these plans may make a great deal of sense. But from a practical perspective, it is difficult for communities to just take care of day-to-day compliance. To put another requirement onto a community is not helpful.

S. Cohen asked about approval of the plans – how will this be defined and what will be DEP’s role? Morris said these are issues that DEP is grappling with. However, based on the way CWMPs are reviewed, if the plan is completed in accordance with the agreed upon scope, the plan will “get points” associated with this. This will impact the community’s rating with respect to SRF funding.

Young commended Morris for her efforts, but he said that LeBeaux’s points were spot on. These plans can cost more than \$500,000 and take years, rather than months, to complete. He added that the prototypes for these plans (CWMPs) do not always get implemented. He then asked if DEP was going to look at the plans that have been written and find out what triggered them and why they have not been implemented? He said that regional plans often made more sense, but a lot of times they are not implemented because of the local recharge issue. In many cases, the effluent is currently discharged miles away from where it was generated. If it is discharged locally to the land, it is going to turn up in surface water nearby. What is the impact of that, he asked. There are a lot of state agencies involved. Right now there doesn’t seem to be one agency that coordinates all this. Morris agreed that DEP would have to be able to work more

closely with the communities and agencies. She asked that people who had been involved in these planning processes in the past email comments to her. She said that DEP wanted this new planning process to work well and not to be unduly burdensome. DEP wants the end-product to be used to solve problems, not to be something that just sits on a shelf.

Stevenson said that the objective is not to punish towns; the goal is to establish practical ways that everyone in the state can maintain a sustained amount of water. She said that she was involved in this process within her town right now and the goal is to help the town and the Ipswich River in the long run. The planning process has forced the community to look at all the aspects of water resources, both good and bad. Morris said that there are communities that have aging infrastructures that need to do capital improvement planning in order to determine where to spend their limited budgets. In these cases, looking at the IWRMP process may make sense. Stevenson said that the fiscal costs were a short-term pain, but the environmental costs can be long-term and it is difficult to assign a dollar value to these.

LeBeaux said that there are towns that are working very hard to do things right. Do we want to let those towns use what money they have (or can get through SRF) to do the work, or to do a level of planning that may not be necessary? McCrory suggested that the state provide financial incentives to communities to do this type of planning. Menoyo suggested that there could be BMPs that could be implemented in lieu of conducting planning at such a detailed level. Gildesgame suggested that IWRMPs be used to provide regulatory relief. Hutchins said that this could be folded into town Master Plans. Baskin said that all the comments and questions raised today were excellent and she suggested that people email their comments to Morris. Young said that improving DEP's water reuse guidelines could achieve many of the ends that this planning effort is designed to achieve. Right now these guidelines are very restrictive. If they were made less restrictive, that would be good. Morris said that DEP will be reviewing these soon.

Morris said that once the document is ready to be made public, DEP will put a notice in the Environmental Monitor. Public comment will be taken before the document is finalized and implemented. Haas suggested that DEP may solicit targeted public comment before then.

Meeting adjourned